PLANNING FOR VISUAL REPRESENTATIONS

Purpose	Interventionists can use this planning worksheet to develop Tier 2 and Tier 3 intervention lessons that incorporate visual representations and other features of explicit instruction.
Materials	*Assisting Students Struggling With Mathematics: Response to Intervention (RtI) for Elementary and Middle Schools*, Recommendation 5 (pp. 74-76)
Media	*Visual Representations*, video interview. Dr. Bradley Witzel provides examples of each stage of the concrete-representational-abstract teaching sequence, with special attention to visual representation. He shows several types of representation, including number lines and strip diagrams. (4:04 min)
Topic	Response to Intervention in Elementary-Middle Math
Practice	Intentional Teaching

Planning for Visual Representations

This planning document is designed to help interventionists provide Tier 2 and Tier 3 mathematics instruction that incorporates visual representations as part of the concrete-representational-abstract (CRA) sequence. The completed planning worksheet serves as a detailed lesson plan to guide implementation and a record for future use.

Planner	
Lesson objective	*(e.g., add fractions with unlike denominators)*
Systematic analysis of problem-solving steps and thinkaloud script notes	*(e.g., ensure that the denominators are the same, multiplying denominator and numerator by same number as necessary; add the numerators; simplify the fraction)*
Choice of concrete materials for demonstration of steps	(e.g., *fractional parts of circles)*
Options for representation for demonstration of steps including sketch	*(e.g., strip diagram)*
Alternative concrete materials and representations including sketch	*(e.g., double number line)*
Problem(s) for guided practice including partially worked examples and suggested concrete materials and visualizations	
Problem(s) for independent or peer practice	
Ways to check for understanding	

What about the lesson worked well? Did visual representations help students develop concepts? Did we spend enough time at each of the CRA levels?
What was difficult for students to grasp? Was anything confusing about the visual representations used?
What might work better next time? What other ideas for concrete materials and visual representations might be useful?